



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/629,855

07/30/2003

Timothy A. Johnson

2540-0664

6159

42624

7590

03/06/2007

DAVIDSON BERQUIST JACKSON & GOWDEY LLP
4300 WILSON BLVD., 7TH FLOOR
ARLINGTON, VA 22203

EXAMINER

VO, TUNG T

ART UNIT

PAPER NUMBER

2621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

03/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/629,855

Applicant(s)

JOHNSON ET AL.

Examiner

Tung Vo

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :07/06; 04/06; 01/07; 09/06; 03/06; 09/07.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Santamaki et al. (US 4,855,825).

Re claim 1, Santamaki discloses a method of communicating video information as the video information changes from one frame to another (figs. 1 and 4), comprising:

a. analyzing pixel values within a current block of the video frame information to determine pixel value frame change (3,4, 12, 13, 14 of fig. 4);

b. testing:

(i) whether a frame change in pixel value for any one of the pixels in the block exceeds a first threshold (6 of fig. 1; Note the reference memory (4 of fig. 1) contains the already transmitted picture information. The difference value or change value between the picture data, received from the comparator (5 of fig. 1), is compared to the change threshold set in the thresholding unit (6 of fig. 1), and if the change value surpasses the preset change threshold, the said pel of image is coded in the coder (7 of fig. 1) and transferred via the transmission buffer (8 of fig. 1) and the output B into the transmission channel, i.e. the picture information is further transferred to the receiver; col.4, lines 28-47) , and

(ii) whether a second threshold number of pixels in the block exceeds in pixel value a third threshold (14 of fig. 4, and 19 of fig. 4, Note the cumulative sum S of the covered change values, i.e. the numbers in the histogram table or the amount of picture areas; wherein the sum S is compared to the reference value Nc preset in the comparator, which value Nc stands for the maximum amount of picture areas which can be transmitted in between the successive frames; col. 6, lines 34-40), and

c. if the conditions of either step b. i. or step b. ii. exceed the thresholds described, then communicating information identifying the pixel values within the block (col. 6, lines 53-63).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Santamaki et al. (US 4,855,825).

Re claims 2 and 3, Santamaki teaches the changed area of the image is encoded and transmitted based on equations (3) and (4) (col. 4, lines 5-30; col. 5, lines 53-67) and the sum S surpasses to the reference value Nc (col. 6, lines 34-39). When Delta M and Delta Mn are equaled to zero (See equations (3) and (4) of Santamaki), and the sum S does not surpass the reference Nc, this would obviously understood that there is no change in image area, and the

Art Unit: 2621

coder (7 of fig. 1) does not encode and transmit any image area, wherein the equations (3) and (4) and the circuit 11 of Santamaki would obviously be programmed (col. 4, line 65-col. 5, line 2). The disclosure of Santamaki would have fairly suggested, to one skill in the art, to set up both conditions of steps b.i. and b.ii. fail to exceed the thresholds described. Since the change threshold unit determines the no change image data, the coder (7 of fig. 1) does not encode any no changed image area data and the buffer (8 of fig. 1) communicates a no change condition in the current block (Note the previous block has been transmitted as considered a no change condition in the current block is processed by the decoder (9 of fig. 1, Note replenishment unit as decoder) and stored the no change condition in the current block in the memory (4 of fig. 1) for further comparison). Moreover, Santamaki teaches the communicated no change condition comprises communicating nothing regarding to the current block (stable background is encoded and transmitted once) and decoding (9 of fig. 1) the video information (coded video information) by writing (storing) current blocks for which nothing communicated as unchanged compare to the corresponding block in a previous frame (Note the reference memory (4 of fig. 1) for storing the unchanged current block corresponding to the block in a previous frame for comparing to a new frame; this means updates a current block as reference).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Music et al. (US 4,816,901) discloses method and system for compressing color video data.


Art Unit: 2621

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung Vo whose telephone number is 571-272-7340. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tung Vo
Primary Examiner
Art Unit 2621